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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/666,329

09/22/2003

Randolph S. Barth

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7590

02/06/2006

Charles I. Brodsky, Esq.  
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Marlboro, NJ 07746

EXAMINER

SAN MARTIN, EDGARDO

ART UNIT

PAPER NUMBER

2837

DATE MAILED: 02/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

**Office Action Summary**

Application No.

10/666,329

Applicant(s)

BARTH, RANDOLPH S.

Examiner

Edgardo San Martin

Art Unit

2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5,8,9 and 20-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5,8,9 and 20-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 November 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1 – 5, 8, 9 and 20 – 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barth (US 5,199,258) in view of Bainbridge (US 5,092,122), and further in view of Richardson (US 3,786,791).

With respect to claims 1, 21 and 22, Barth teaches an exhaust system of an automotive vehicle comprising a collector pipe having multiple inputs (Fig.2, Items 72, 74, 76 and 78) and an output; a plurality of header pipes (Fig.1, Items 80, 82, 84 and 86) individually coupled from the head of an internal combustion engine to one of the multiple inputs of the collector pipe; an exhaust pipe coupled to the output of the collector pipe; with each of the header pipes and the exhaust pipe being composed a plurality of pipe segments of preselected length, cut at their ends at preselected angles, for joining together in orientation to traverse component parts of the rear housing, steering system and control installations of the automotive vehicle (Figs.1 – 3; Col.2, Line 67 – Col.5, Line 31); but fails to disclose wherein at least one of the exhaust pipe and each of the header pipes having an outer diameter less than an inner diameter of a further pipe additionally included to surround and contain the pipe segments thereof and

with the surrounded pipe segments having a plurality of apertures spaced apart from one another along their respective lengths.

Nevertheless, Bainbridge teaches an exhaust system of an automotive vehicle comprising an exhaust pipe (Fig.7, Item 32) having an outer diameter less than an inner diameter of a further pipe (Fig.7, Item 36) additionally included to surround and contain same (Figs.6 – 8; Col.2, Line 59 – Col.4, Line 66).

On the other hand, Richardson teaches a surrounded pipe segment (Fig.1, item 20) having a plurality of apertures (Fig.1, Item 22) spaced apart from one another along their respective lengths (Fig.1; Col.4, Line 57 – Col.5, Line 14).

It would have been obvious to a person with ordinary skill in the art at the time of the invention was made to employ the Bainbridge double pipe configuration with the Barth design because it would provide the system with a insulated pipe section strong enough to withstand the rigors of use and further providing heat shielding properties and exhaust system noise absorption, and the Richardson apertures would permit a direct interaction of the flowing gases with the sound absorbing material increasing the sound attenuation characteristic of the system.

With respect to claim 2, Bainbridge teaches wherein the further included pipe (Fig.3, Item 36) is centered about the pipe segment (Fig.3, Item 32).

With respect to claims 3 and 4, the Examiner considers that it would have been an obvious matter of design choice to provide pipe segments of certain diameters in order to acoustically tune the pipe segments, in addition to provide an optimum flow performance, since it has been held that where the general conditions of a claim are

Art Unit: 2837

disclosed in the prior art, discovering the optimum or working ranges involves only routine skill in the art. In re Aller, 105 USPQ 233; furthermore, such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. In re Rose, 105 USPQ 237 (CCPA 1955).

With respect to claims 5 and 20, the Examiner considers that the obvious combination of Barth and Bainbridge teach the limitations described in the claims (Barth: Figs.1 – 3; Col.2, Line 67 – Col.5, Line 31; Bainbridge: Figs.1 – 3 and 6 – 8; Col.2, Line 59 – Col.4, Line 66).

With respect to claims 8 and 9, Bainbridge teaches further including a fiber insulation (Figs.2, 7 and 8, Item 38; Col.3, Lines 43 – 55) wrapping around the surrounded pipe segments (Figs. 2, 7 and 8, Item 32); and Richardson teaches including a fiber insulation (Fig.1, Item 30; Col.3, Lines 18 - 23) wrapping around the surrounded pipe segments (Fig.1, Item 20). Furthermore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ steel wool as the fiber insulation material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. In re Leshin, 125 USPQ 416.

### ***Response to Arguments***

2. Applicant's arguments filed on November 29, 2005 have been fully considered but they are not persuasive. The Examiner considers that the obvious combination of the patents to Barth, Bainbridge and Richardson teach the limitations described in the claims as discussed above. The Richardson patent have been incorporated to clearly show the well-knowledge of the limitation describing a plurality of apertures on a surrounded pipe, so as to support the Official Notice taken by the Examiner in the previous Office Action.

### ***Conclusion***

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edgardo San Martín whose telephone number is (571) 272-2074. The examiner can normally be reached on 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula Bradley can be reached on (571) 272-2800 ext.33. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Edgardo San Martín  
Primary Examiner  
Art Unit 2837  
Class 181  
January 26, 2006